

Math 3 Advanced

5.4 Practice Problems part 2

Determine the domain intervals for the local extrema of a polynomial function given in standard form.

1. $f(x) = x^3 + 3x^2$

2. $g(x) = 2x^3 - 2x^2$

3. $h(x) = x^3 - 5x^2$

4. $r(x) = 3x^3 + 6x^2$

5. $f(x) = 2x^3 + 5x^2 - 12x$

6. $n(x) = 4x^3 + 3x^2 - x$

7. $g(x) = 3x^3 + 13x^2 - 10x$

8. $h(x) = 5x^3 + 9x^2 - 2x$

9. $f(x) = x^3 - 3x^2 - 2x + 6$

10. $g(x) = x^3 + x^2 - 5x - 5$

11. $g(x) = x^3 + 6x^2 - 3x - 18$

12. $h(x) = x^3 - 4x^2 - 6x + 24$